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| 10/576,832 | 03/05/2007 | Carsten Herpel | PD030110 | 2274 |
| 24498 | 7590 | 09/14/2009 | | EXAMINER |
| Thomson Licensing LLC P.O. Box 5312 Two Independence Way PRINCETON, NJ 08543-5312 | | | | HARVEY, DAVID E |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--------------------------------------|
| Office Action Summary | Application No. 10/576,832 | Applicant(s) HERPEL ET AL. |
| | Examiner DAVID E. HARVEY | Art Unit 2621 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 11-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 April 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-166/08)
 Paper No(s)/Mail Date 4/24/2006
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) With respect to claim 11 (and 12-15 that depend therefrom):

1) The examiner notes that the preamble of claim 1 appears to be directed to a "storage medium" while the body of the claim appears to be directed to a data structure stored on the storage medium (not the storage medium itself). Thus, the recitation of "the storage medium comprising" in lines 2 of claim 11 appears to be misdescriptive. Clarification is needed. Similar clarification is needed for claims 12-15 that depend therefrom.

4. **The following "prior art" is noted:**

A) Applicant's admitted "prior art":

Under the heading "Background" on pages 1-2 of the instant specification applicant admits that it was known/conventional:

- 1) For electronic multimedia content to have been distributed on exchangeable recording media such as optical discs (i.e., DVDs);
- 2) For such recording media to have been played by playback devices (i.e., DVD players);
- 3) For such playback devices to have functioned based on "a lot of firmware" (i.e., software programs/data) stored therein; and
- 4) For the firmware of such playback devices to have been updated, using sold/distributed update-CDs.

B) Japanese Patent Document #11-003219 to Fujioka (machine generated translation attached hereto):

Fujioka has been cited because it evidences a system in which the firmware of a DVD player (i.e., @ Figure 2) is updated via a DVD provided to the DVD players' registered users/owners by the DVD players manufacturer [Note paragraphs 0001, 0016, 0017, and 0035 of the provided translation].

C) US Patent 5,710,674 to Takei:

Takei has been cited because it illustrates a system in which program data is recorded on a disc (i.e., Figure 1), along which A/V presentation information, to control the operation of a playback device (i.e., Figure 2).

D) US Patent Document #2004/0081433 to Stewart:

Stewart as been cited because it evidences that it was well known in the art to have added information representing special features/benefits to conventional DVDs (note Figure 1) in order to entice consumers to purchase a producer's DVD, wherein the special features/benefits include software updates for updating information recorded on the DVD. [e.g., Note claim 12 thereof].

E) US Patent Document #2003/0068162 to Tsai et al.:

Tsai et al. as been cited because it evidences a digital player (e.g., @ 100 of Figures 6-9) including:

- 1) A primary module (e.g., @ 101, 213, & Figure 8) for playing A/V information provided from a DVD; and
- 2) A secondary module (e.g., @ 102 & 212) for receiving software updates from said DVD.

[e.g., Note claims 10-17 thereof].

F) US Patent Document #2001/0044933 to Tagiri et al.:

Tagiri et al. has been cited because it evidences a system in which the firmware of an optical disc player is updated, as needed, by version-up data located in a version-up file located on an optical disc (i.e., note figure 2) [Note paragraphs 0005, 0018-0021, 0025, and claim 3 thereof].

G) US Patent Document #2004/0107356 to Shamoon et al.:

Shamoon et al. has been cited because it evidences that is was well-known in the media player art that firmware updates were "inherently" player device/type specific [See paragraphs 0622 and 0633].

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art" and US Patent #7,227,824 to Kuroda.

A) Applicant's admitted "prior art":

As addresses above in part "A" of paragraph 4 of this Office action, the "Background" section of the instant specification (@ pages 1-2) described "prior art" on which the instant invention was based, and in doing so:

- 1) Defined the term "Firmware" as "Software" [note line 19 on page 1 of the instant specification];
- 2) Acknowledged that conventional DVD players contained a lot of such Firmware/Software which typically had to be updated several times during the lifespan of the DVD player [note lines 11-14, 17-18, and 23-28 on page 1 of the instant specification]; and
- 3) Acknowledged that it was known in the art to have provided the required firmware/software updated video a sold/distributed update-CD [note lines 7-10 on page 2 of the instant specification].

B) The showing of Kuroda:

As is illustrated in Figure 1, Kuroda discloses a "**removable prerecorded storage medium**" (@ 10), comprised of an DVD optical disc, that is to be read by the DVD playback device of Figure 1. As is shown/described with respect to Figure 2, the storage medium is formatted according to the conventional DVD standard to include:

- 1) "**Audio-visual presentation data**" (e.g., A/V data representing movie) which was to be played, in conventional DVD fashion, by the DVD playback device of Figure 1. [Note lines 55-62 of column 5]

Said storage medium was further formatted to contain embedded "**corrected playing program data**" (i.e., corrected/updated software) [Note lines 6-18 of column 6],

wherein said corrected program data was structured in a plurality of data portions each of which corresponded to a particular type (e.g., model) of DVD playback device [Note: Figure 5; and lines 55-68 of column 7].

C) Differences:

- 1) Claim 11 differs from applicants' admitted prior art only in that:

- A) The firmware updates were provided on CD as opposed to a conventional DVD (i.e., one that includes convention DVD audio-visual presentation information); and

B) The firmware updates did not comprise different portions directed to different types of players.

2) Claim 11 differs from the showing of Kuroda only in that Kuroda does not explicitly state that the "corrected playing program data" represents and/or comprises "firmware update data".

D) Obviousness:

1) It would have been obvious to one of ordinary skill in the art to have modified the "prior art" described by applicant in accordance with the teachings of Kuroda:

A) So as to provide the firmware updates embedded within the presentation data of a conventional DVD; i.e., thereby advantageously avoiding the need for technically skilled persons (note lines 7-10 on page 2 of the instant specification); and

B) To have provided firmware updates in plural portions corresponding to different types of playback devices; i.e., thereby advantageously enabling a single DVD to provide all required updates.

2) **Alternatively**, it would have been obvious to one of ordinary skill in the art to have modified the system disclosed by Kuroda in accordance with the acknowledged prior art whereby the "corrected playing program data" was implemented using "firmware update data" as was evidenced by the admitted prior art as being known/needed/desired; i.e., and assuming that the recited "firmware" terminology requires more than the program correction/"patch" data explicitly described in Kuroda.

7. **Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art" and US Patent #7,227,824 to Kuroda for the same reasons that were set forth above with respect to claim 11. Additionally:**

A) With respect to claim 14:

The examiner notes that the program data (i.e., firmware) stored on the storage medium is "only temporarily stored in the playback device" given that the DVD is removed after playing and, alternatively, given that the firmware can/will, as admitted by applicant, itself be updated during the lifetime of the apparatus.

B) With respect to claim 15:

The examiner notes that the storage medium contains a data structure having "separate branches" in that each type of DVD data, by definition, is separately retrieved and processed (i.e., via its own branch).

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8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art" and US Patent #7,227,824 to Kuroda for the same reasons that were set forth above with respect to claim 11, further in view of US Patent Document #2001/0044933 to Tagiri et al. Additionally:

A) With respect to claim 12:

First the examiner notes that Kuroda itself recognized that the program data (i.e., the firmware) can be stored on the DVD in the lead-in and or user area [Note lines 12-16 of column 6]. Since the DVD standard requires data to be stored in a computer compatible "file" format, this teaching is at least suggestive of a file format/structure for the program data (i.e., firmware). Regardless, the examiner notes that Tagiri et al explicitly evidences that it was known to have stored such firmware update data in a file format [e.g., note paragraphs 018-022].

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art" and US Patent #7,227,824 to Kuroda for the same reasons that were set forth above with respect to claim 11, further in view of US Patent Document #2001/0044933 to Tagiri et al. Additionally:

A) With respect to claim 13:

First the examiner notes that Kuroda itself recognized that the program data (i.e., the firmware) can be stored on the DVD in the lead-in and or user area [Note lines 12-16 of column 6]. Since the DVD standard requires data to be stored in a computer compatible "file" format, this teaching is at least suggestive of a file format/structure for the program data (i.e., firmware). Regardless, the examiner notes that Tagiri et al explicitly evidences that it was known to have stored such firmware update data in a file format (e.g., note paragraphs 018-022).

Additionally, the examiner takes Official Notice that it was notoriously well known in the art for such files to be organized in a "tree structure" to simplify the process of locating that portion of the information that is needed/required. It would have been obvious to one of ordinary skill in the art to have organized the program data in the modified system of Kuroda and the admitted prior art using a conventional tree structure given that each player must find and process the portion of the program data (i.e., the model specific update) that pertains thereto.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art", US Patent #7,227,824 to Kuroda, and US Patent Document #2001/0044933 to Tagiri et al for the same reasons that were set forth above with respect to claim 13. Additionally:

With respect to the steps recited in claim 16, see the steps of the program updating processing/method shown in Figures 3 and 4 of Kuroda. It is the examiner position that the modified system of the prior art would have operated accordingly.

11. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art", US Patent #7,227,824 to Kuroda, and US Patent Document #2001/0044933 to Tagiri et al for the same reasons that were set forth above with respect to claim 16.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art", US Patent #7,227,824 to Kuroda, and US Patent Document #2001/0044933 to Tagiri et al for the same reasons that were set forth above with respect to claim 16. Additionally:

With respect to the "means" recited in claim 20, see the structure/"means" for performing the program updating processing/method of Figures 3 and 4 in Kuroda as illustrated in Figure 1 of Kuroda. It is the examiner position that the modified system of the prior art would have been structured accordingly.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. HARVEY whose telephone number is (571) 272-7345. The examiner can normally be reached on M-F from 6:00AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Marsh D. Banks-Harold, can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID E HARVEY/

Primary Examiner, Art Unit 2621

DAVID E HARVEY
Primary Examiner
Art Unit 2621